THE APPLICATION OF KEBO OIL & GAS, INC. TO CONSIDER INCREASED NET GAS-OIL RATIO AUTHORITY FOR THE PISTOL HILL 2 LEASE, WELL NO. 2, IN THE ROMA (YEGUA) FIELD, STARR COUNTY, TEXAS

**Heard by:** Andres J. Trevino, P.E. - Technical Examiner

Date of Hearing: June 24, 2010

Appearances: Representing:

Dale E. Miller Kebo Oil & Gas, Inc.

# **EXAMINER'S REPORT AND RECOMMENDATION**

#### STATEMENT OF THE CASE

Kebo Oil & Gas, Inc. requests authority to produce its Pistol Hill 2 Lease, Well No. 2, under increased net gas-oil ratio authority with a daily gas limit of 300 MCFGPD. Kebo also requests that all overproduction for the lease be canceled.

This application was unprotested and the examiner recommends approval of the increased net gas-oil ratio authority with a daily gas limit of 300 MCFGPD and cancellation of lease overproduction.

### **DISCUSSION OF EVIDENCE**

The Pistol Hill 2 Lease, Well No. 2 was completed in the Roma (Yegua) Field and is currently the only well in the field. The field operates under Statewide Rules and the top allowable is 74 BOPD with a casinghead gas limit of 148 MCFPD.

The Pistol Hill 2, Well No. 2, was completed into a Yegua sand with perforations from 1,349 feet to 1,352 feet. On initial test, the well produced flowing at a rate of 8 BOPD, 111 MCFGPD and 5 BWPD. The initial GOR was 22,200 cubic feet per barrel.

The Pistol Hill 2 Lease, Well No. 2, is the only oil producing well from a Yegua sand in the area. Kebo believes that this is a limited reservoir and no additional wells will be drilled. The primary drive mechanism for the reservoir is a solution gas drive, which results in decreasing oil production, increasing gas production and higher well GORs.

Kebo tested the Pistol Hill 2 Lease, Well No. 2, during May and June 2010. The results of the testing are summarized as follows:

Choke Size (in)	Oil Rate (bopd)	Gas Rate (mcfpd)	FTP (psi)	GOR (cuft/bbl)
18/64	3.1	190	210	61,418
20/64	3.6	218	215	60,440
24/64	3.6	231	200	64,144

The step rate test demonstrates that the well produces at the lowest GOR on a 20/64" choke. When the choke size is increased or decreased the GOR increases. Additionally, producing the well on a 18/64" choke caused the well to begin loading. In order to maximize production and prevent waste, Kebo requests an increased net gas-oil ratio authority with a casinghead gas limit of 300 MCFGPD be approved. The requested rate is slightly higher than the test rates above, but it will give flexibility in future producing rates, as the GOR increases due to the solution gas drive. This will also allow for the depletion of the reservoir without any reservoir damage, prevent oil from being left behind in the formation if the gas production is curtailed and increase the ultimate recovery from the field.

Kebo requests that any overage that may exist for this lease be cancelled. It is estimated that the well is overproduced by 9,787 MCF of gas as of April 2010.

#### FINDINGS OF FACT

- 1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
- 2. The Pistol Hill 2 Lease, Well No. 2 was completed into the Roma (Yegua) Field and is the only well in the field. The field operates under Statewide Rules and the top allowable is 74 BOPD with a casinghead gas limit of 148 MCFPD.
- 3. The Pistol Hill 2 Lease, Well No. 2, was completed into a Yegua sand with perforations from 1,349 feet to 1,352 feet. On initial test, the well produced flowing at a rate of 8 BOPD, 111 MCFGPD and 5 BWPD. The initial GOR was 22,200 cubic feet per barrel.
- 4. The Pistol Hill 2 Lease, Well No. 2, represents the only oil production from a Yegua sand in the area, produces from a limited reservoir. The primary drive mechanism for the reservoir is a solution gas drive, which results in decreasing oil production, increasing gas production and higher well GORs.
- 5. The step rate test demonstrates that the well is rate sensitive. The step rate test demonstrates that the well produces at the lowest GOR on a 20/64" choke. When the choke size is increased or decreased the GOR increases.

Additionally, producing the well on a 18/64" choke caused the well to begin loading.

- 6. Producing the well at rates of up to 300 MCFGPD will not cause waste.
- 7. It is estimated that the well is overproduced by 9,787 MCF of gas as of April 2010.

### **CONCLUSIONS OF LAW**

- 1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
- 2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.
- 3. Approval of the increased net gas-oil ratio authority with a casinghead gas limit of 300 MCFGPD for the Pistol Hill 2 Lease, Well No. 2, in the Roma (Yegua) Field and cancellation of overproduction will not cause waste and will not harm correlative rights.

## **RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends that the Pistol Hill 2 Lease, Well No. 2, in the Roma (Yegua) Field be authorized to produce under net gas-oil ratio authority with a daily gas limit of 300 MCFGPD and that all accumulated overproduction for this lease be canceled.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Examiner